SCOPE OF CLAIMED INVENTION

1. A through hole examination method characterized in comprising: irradiating light from one side of a work piece having a through hole; and detecting passing light by imaging the passing light from the other side of the work piece by a sensor camera having a plurality of imaging elements, wherein the examination is conducted by imaging with an imaging focal point of the sensor camera being shifted with respect to the surface of the work piece.

2. A through hole examination method characterized in comprising: irradiating light from one side of a work piece having a plurality of through holes; imaging and detecting passing light from the other side of the work piece by a sensor camera having a plurality of imaging elements, wherein the imaging is conducted with a focal point of the sensor camera being shifted from the surface of the work piece to obtain images corresponding to the through holes, and areas of the images of the through holes are compared with one another to examine differences or uniformity of the through holes or examine foreign matters in the through holes.

3. A through hole examination method according to claim 1 or claim 2, wherein a line sensor camera is used as the sensor camera, and the imaging is conducted by shifting the camera relative to and in parallel with the work piece.

4. A through hole examination method according to claim 1 or claim 2, wherein the imaging focal point of the sensor camera is shifted from the surface of the work piece to conduct imaging such that an area of an image of the passing light is expanded.

5. A through hole examination apparatus comprising: a light source; a sensor camera having a plurality of imaging elements; a table on which a work piece having through holes is mounted being interposed between the light source and the sensor camera, wherein

the sensor camera is capable of imaging light passing through the through holes, and

a relative position between the sensor camera and the surface of the work piece is set such that an imaging focal point of the sensor camera is shifted from a surface of the work piece; and

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an image processing device that receives imaging signals provided by the sensor camera and performs a process for comparing imaged areas.

6. A through hole examination apparatus according to claim 5, wherein the table is a parallel displacement table, and the sensor camera is a line sensor camera.

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